

SOME INJURIOUS INDIAN WEEVILS (CURCULIONIDAE)—II.

By GUY A. K. MARSHALL, Hon. D.Sc. (Oxon.).

Among some weevils forwarded for identification by Mr. T. Bainbrigge Fletcher, Imperial Entomologist, Pusa, Bengal, certain species were indicated as causing damage of economic importance; of these the following six species proved to be undescribed.

EMPERORRHINUS, gen. nov.*

Rostrum stout, longer than the head and continuous with it; the mandibles very unequal, the left being much the larger and projecting (when closed) considerably beyond the genae; in conformity with this, the left gena is also more developed and projects further beyond the scrobe than does the right one, the rounded apical excision of the rostrum being therefore asymmetrical; the scrobes dorsal and apical, short and curving abruptly inwards, so that the space between them is scarcely half the width of the forehead; the process covering the condyle of the antenna convex, testaceous and shiny, superficially appearing as though it might be the condyle itself; mentum small, subcircular and bearing a transverse row of four bristles. *Antennae* long and slender, the scape curved and reaching the middle of the prothorax, the two basal joints of the funicle elongate, the remainder longer than broad. *Prothorax* truncate at the base, the anterior margin laterally sloping backwards from above downwards; the anterior coxae quite close to the front of the prosternum. *Elytra* much broader than the prothorax and with prominent shoulders. *Abdomen* with the intercoxal process ogival, segment 2 slightly longer than 3 and 4 and separated from 1 by a deeply sinuate incision. *Legs* slender, all the femora with a single small tooth, the corbels of the posterior tibiae open, the tarsal claws free.

Genotype, *Emperorrhinus pyricola*, sp. n.

This genus, which belongs to the group PHYLLOBIINI, is nearly related to *Mylocerus*, with which it agrees in most characters, but it should readily be distinguished by the remarkable asymmetry of the rostrum, a character which I have never previously observed in any adelognathous Curculionid. Other points which distinguish the genus from *Mylocerus* are, the projection of the closed mandibles well beyond the apices of the genae and the proximity of the front coxae to the anterior margin of the prosternum.

* ἑμπερρος, deformed; ῥίς, nose.

Emperorrhinus defoliator, sp. nov. (fig. 1).

Black, densely clothed with mingled black and bright metallic green scaling; head and rostrum green; prothorax green, with a broad central black stripe; elytra variable, but with the green and black scaling fairly equally distributed in alternating small subquadrate patches on the dorsal intervals; there is often a somewhat large black patch near the base on intervals 3 to 6, and occasionally the black scales greatly predominate.

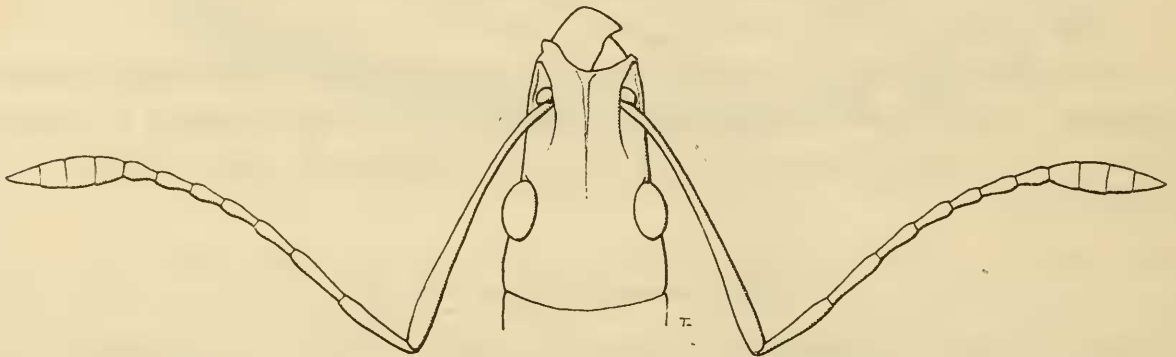


Fig. 1. Head of *Emperorrhinus defoliator*, Mshl., sp. n.

Head finely striolate longitudinally, the fore head quite twice as broad as the space between the scrobes, the eyes moderately convex. *Rostrum* with the left side (excluding the mandible) somewhat shorter than the basal width, distinctly narrowed from the base to apex, the sides being almost straight; the interscrobial area almost plane, finely striolate beneath the scaling, and with a fine central carina in the anterior part. *Antennae* reddish brown; the funicle with the two basal joints subequal, or the first very slightly longer, the remaining five subequal and much longer than broad. *Prothorax* transverse, truncate at base and apex, which are of equal width, the sides rounded only in the middle, markedly constricted in front and behind; the dorsum rather uneven, without any central furrow or carina, the somewhat rugose punctures normally hidden by the scaling, the setae suberect and all directed forwards. *Elytra* much broader than the prothorax at the shoulders, which are rounded rectangular, parallel-sided in the male and slightly dilated behind the middle in the female, the apices jointly rounded, and the dorsal outline only slightly convex; the shallow striae not hidden by the scaling and containing shallow punctures, the intervals almost plane, shining and impunctate; the scales small, convex and subcircular, the green ones for the most part contiguous, the black more sparse, so that the shining surface is partly visible; the setae slender, long, dark and erect. *Legs* red-brown, the femora darker, with recumbent pale setae and scattered green scales.

Length, $2\frac{1}{2}$ – $3\frac{1}{2}$ mm.; *width*, $1\frac{1}{4}$ – $1\frac{1}{2}$ mm.

PUNJAB: Chawai, Kulu, Kangra district (*type*). SIKKIM: Kurseong, 6,000 ft. (*E. A. D'Abreu*); Darjiling (*Harmand*). ASSAM: Khasi Hills (*teste* H. E. Andrewes).

This species superficially resembles such small *Myllocer* as *M. dorsatus*, F., and *M. pretiosus*, Fst., but may be readily distinguished by the abnormal structure of the rostrum. I have examined 36 specimens.

Mr. C. F. C. Beeson, Imperial Forest Zoologist, Dehra Dun, from whom specimens have also been received, states that this species defoliates various kinds of fruit trees, such as, pears, peaches, cherries, etc.

Mr. Fletcher states that the correspondent from whom he received his specimens informed him that the weevils first appeared on an alder tree (*Alnus nitida*) in a field adjoining his orchard. After completely defoliating the alder, they attacked his peach trees, and then turned their attention to the apricots and pears, apples being the last trees to be touched. The whole orchard was entirely defoliated.

Coniatus indicus, sp. nov.

Colour black, densely clothed with bright metallic green scaling, the vertex of the head and almost the entire disk of the prothorax with pink scales, the pink area with more or less blackish scaling laterally in the basal half; the elytra with a common broad anchor-shaped black patch near the base; its arms extending indefinitely to beyond the third stria and the shaft running along the first interval to the base; behind the middle another common V-shaped black marking, the arms of which extend to the 6th or 7th stria and are crossed obliquely by a short black stripe lying on intervals 4 and 5; the space between these two black markings and a large patch on the declivity behind them covered with pink scales.

Head with the forehead much broader than the diameter of the eye and broader than the rostrum in its widest part. *Rostrum* gradually dilated from base to apex, scarcely as long as the prothorax and only slightly curved; colour testaceous, the basal half rather coarsely punctate and covered with scaling, the apical half more or less bare and shining; the scrobes continued in front of the antennae in the form of a furrow, and above this a punctate longitudinal impression. *Antennae* inserted well beyond the middle of the rostrum, testaceous, with sparse green scales; the scape not nearly reaching the eye, the funicle with joint 1 much broader than the rest and nearly as long as the next three together, joint 2 longer than 3, the remainder subequal and scarcely as long as broad. *Prothorax* as long as broad, subparallel-sided from the base to beyond the middle, thence narrowing to the apex, the basal margin somewhat oblique on each side so that there is a slight angle in the middle; the upper surface uniformly set with contiguous shallow punctures which are quite hidden by the scaling. *Elytra* relatively broad, parallel-sided, the humeral prominence well developed, the apical area not produced but broadly rounded, the apical declivity steep and the posterior calli feeble. *Legs* black, with the tarsi and the base and apex of the tibiae red-brown, the whole densely clothed with green scaling, the tarsal claws black with the tips red-brown, the tarsi unusually long and slender, especially the fourth joint.

Length, $2\frac{1}{2}$ – $3\frac{1}{4}$ mm.; *width*, $1\frac{1}{4}$ – $1\frac{5}{8}$ mm.

BENGAL: Pusa.

This pretty little weevil is interesting as being the first species of the genus recorded from outside the Palaearctic Region. It is most nearly allied to *C. splendidulus*, F., from Siberia, with which it agrees in having the mesosternal process dilated at the apex; but in that species the apical portion of the elytra is distinctly more produced, the posterior declivity slopes much more gradually and the posterior calli are more prominent, while the 4th joint of all the tarsi is distinctly less elongate. The following

colour distinctions also appear to be reliable ; in *C. splendidulus* the anterior black marking on the elytra is merely a longitudinal patch without anchor-like arms, the succeeding pink area extends right up to the shoulder (whereas it always ceases long before the shoulder in *C. indicus*), and the tibiae are entirely testaceous. The colouring of *C. indicus* appears to be relatively constant in a long series of specimens.

This weevil is recorded as attacking *Tamarix indica*, and most of the palaearctic species appear to be specially attached to plants of this genus.

***Ceuthorrhynchus portulacae*, sp. nov. (fig. 2).**

Colour black or dark brown, with the antennae, tarsi, tibiae and apex of the rostrum paler ; fairly densely clothed with elongate, truncate, slightly elevated, greyish and brownish scales, which are mingled irregularly and through which the shiny integument is easily visible ; the pronotum has in the basal half a central stripe composed of much broader ovate whitish scales ; this stripe is continued on to the first interval of the elytra, extending for about one-third of its length, but here the scales are more dense and often of a yellowish or brownish tinge.

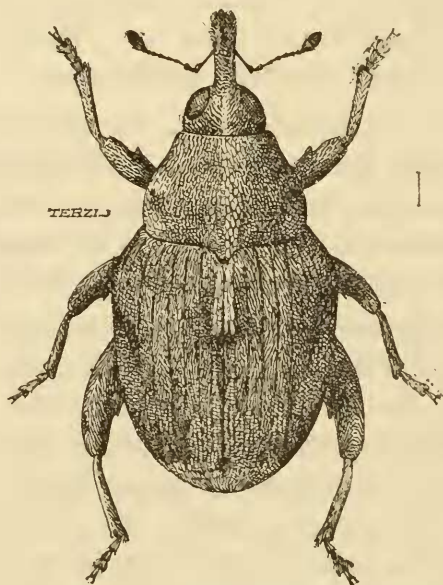


Fig. 2. *Ceuthorrhynchus portulacae*, Mshl., sp. n.

Head with coarse confluent punctation, the forehead broad and flat ; the scales narrower than those on the pronotum, elevated along the margin of the eyes but recumbent elsewhere, those on the forehead directed backwards, those on the vertex directed forwards. *Rostrum* comparatively stout and unusually short, scarcely as long as the prothorax in the ♀, shorter in the ♂, gently curved and gradually dilated from base to apex, being there about as broad as the apical portion of the front femur ; the upper surface coarsely punctate and with sparse narrow scales as far as the antennae, beyond that smooth and almost impunctate. *Antennae* testaceous, inserted well beyond the middle of the rostrum, the scape terminating in a sharp point ; the funicle with joint 1 longer and much broader than the others, 2-4 much longer than broad and diminishing progressively in length, 5-7 subequal and about as long as broad. *Prothorax* transverse, broadest near the base and thence strongly narrowed to the apex, the sides being almost straight, the front margin forming an elevated

lamina dorsally which is broadly sinuate in the middle, the base deeply bisinuate; the upper surface moderately convex and with coarse reticulate punctation throughout, a small tubercle on each side a little behind the middle, and a basal impression in front of the scutellum. *Elytra* scarcely as long as their greatest width, broadest at the shoulders, which are rounded, and gradually narrowed behind, the sides being almost straight; upper surface with a flattened triangular area in the basal half, the posterior declivity sloping gradually and without any prominent tubercles, a deep impression round the scutellum, the striae rather shallow and not very conspicuous through the scaling, owing to each containing a row of recumbent setae, the intervals broad, very rugosely sculptured in the flattened area and rather less so elsewhere. *Legs* fairly densely clothed with narrow elongate whitish scales.

Length, $2\frac{1}{2}$ mm.; *width*, $1\frac{1}{2}$ mm.

BENGAL: Pusa.

Recorded as injuring purslane (*Portulaca oleracea*), which is cultivated as a vegetable. The larvae mine the leaves of the plant.

Only two species of *Ceuthorrhynchus* have been previously described from India, *C. asperulus*, Fst. (D. E. Z., 1898, p. 323) and *C. sexnotatus*, Schultze (D. E. Z., 1899, p. 190). The former may be distinguished by the following characters, *inter alia*: the sides of the prothorax are parallel in the basal half and the apical margin is not sinuate dorsally, the entire upper surface bears only setae without any scales, and the intervals of the elytra are set with small acute tubercles. *C. sexnotatus* has a much longer and more slender rostrum, which is tricarinate in the basal portion; the terminal joints of the funicle are double as long as broad, and the apical margin of the prothorax is not elevated; it is a much larger insect ($4\frac{1}{2}$ –5 mm.) and differs in colouring. A much nearer ally is the European *C. cognatus*, Schultze, which is very similar in general shape and sculpture, but the rostrum is much longer and more slender, the anterior edge of the prothorax is not so elevated nor sinuated, the elytra are much less coarsely sculptured, the legs are much stouter and the femoral tooth is larger.

***Baris portulacae*, sp. nov. (fig. 3).**

General colour black, the head, rostrum and legs red-brown; prothorax rather thinly covered with long truncate yellow-brown scales, all lying transversely, and leaving bare a narrow median line, a basal patch on each side of it, and the anterior angles; elytra with a transverse basal patch of similar scales extending on each side to the third stria and continued backwards as a narrow sutural stripe to well beyond the middle, where it unites with a transverse band of white scales, which extends on each side as far as the fourth stria; a small humeral spot of white scales, and a few isolated white scales on intervals 5, 7 and 9 and near the apex; venter with very minute sparse white scales; sternum with much larger and closer scales, which are densest on the side-pieces.

Head bare, finely shagreened, with scattered shallow punctures. *Rostrum* strongly bent near the base and gently curved beyond, slightly dilated from base to apex, coarsely punctate throughout, each puncture containing a minute white seta, and with two fine longitudinal carinae on each side; a tuft of a

few yellowish scales at the base just above the eye. *Antennae* red-brown, with the scape paler; funicle gradually widening to apex, joints 2 to 7 transverse, 2 scarcely longer than 3. *Prothorax* about as long as broad, almost parallel-sided from the base to the middle, thence roundly narrowed and shallowly constricted near the apex, coarsely punctate throughout, with a smooth narrow central line extending from the apex nearly to the base. *Scutellum* small, subcircular. *Elytra* a little broader at the shoulders than the prothorax, deeply striate, the intervals plane and shiny, bearing one or two irregular rows of faint punctures, each containing a small recumbent dark seta. *Legs* clothed with long white scales, the femora sub-linear and without a tooth, the second joint of the tarsi scarcely broader than the first, the tarsal claws free.

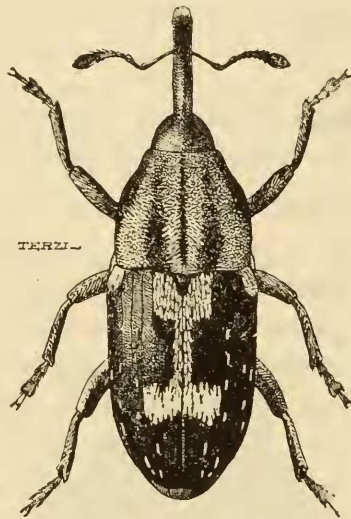


Fig. 3. *Baris portulacae*, Mshl., sp. n.

Length, 2.5–3.5 mm.; *width*, 1–1.75 mm.

BENGAL: Pusa.

Boring in the stems of purslane (*Portulaca oleracea*).

I know of no Indian species which much resembles this insect, but it is very closely allied to *B. multivaga*, Champion, from the Seychelles. The latter is a rather larger insect in which the punctures on the prothorax are more widely separated, while those on the elytra are much coarser than in *B. portulacae*.

Baris lorata, Mshl. (Ent. Mo. Mag., 1911, p. 207) attacks the same plant in the Anglo-Egyptian Sudan.

***Athesapeuta oryzae*, sp. nov. (fig. 4).**

Ground-colour rather shiny black, ornamented with patches of elongate yellowish-white scales; the whole lower surface fairly densely scaled, the scales being somewhat closer on the meta-episternum; head and rostrum bare; prothorax with a broad lateral stripe, which is continuous with the scaling of the lower surface, but interrupted about the middle by a small bare kidney-shaped spot; elytra with a large basal patch consisting of lines of scales on intervals 3–8, those on 5 and 6 the longest, those on 4, 3, 7 and 8 diminishing in the order given, the whole patch covering about one-third

of the elytra and leaving the shoulder bare ; close behind it another large irregular patch, the lines of which on intervals 2, 3, 4, 8 and 9 are short, 5, 6 and 7 being longer, that on 5 usually the longest ; and finally, a V-shaped apical patch extending from interval 3 to 8.

Head regularly convex, very finely shagreened, fairly closely and regularly set with deep punctures. *Rostrum* separated from the head by a distinct impression, a little longer than the prothorax, strongly curved, coarsely punctate, especially at the sides, and with an impunctate central line. *Antennae* black, with whorls of stout yellowish white setae ; joint 1 twice as long as 2, 2 as long as 3 and 4 together, 3-7 transverse. *Prothorax* slightly broader than long, broadest at the base, the sides gently rounded,

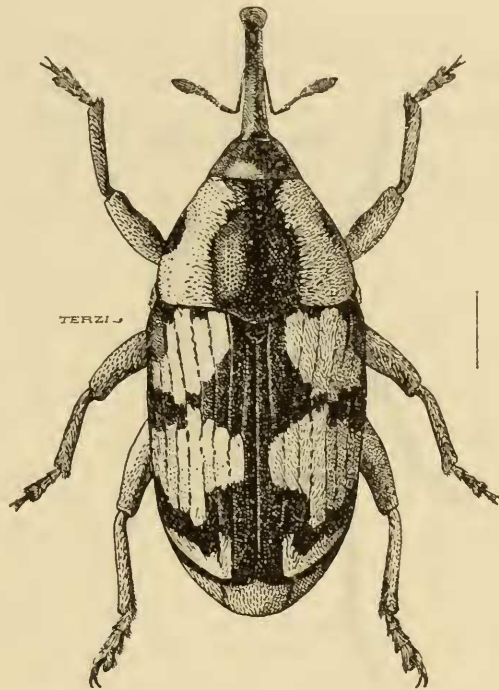


Fig. 4. *Athesapenta oryzae*, Mshl., sp. n.

with a broad but shallow apical constriction, the upper surface coarsely and closely punctate, with an abbreviated impunctate line in the middle only. *Scutellum* strongly transverse, coarsely punctate and with narrow scales ; the posterior margin truncate or slightly angulate. *Elytra* oblong, broader than the prothorax at the shoulders, the apices separately rounded, deeply striate, the intervals almost plane, with irregular coarse punctures. *Legs* black, fairly densely clothed with yellowish white scales.

Length, 5.5-6 mm. ; *width*, 2.5-2.75 mm.

MADRAS : Coimbatore (*type*) ; Pithapuram, Godaveri.

Nearly allied to *Athesapenta famula*, F., but in that species the scaling of the upper-side is of an orange-red colour and more extensive, leaving only a median row of three bare patches, a circular one on the thorax, a triangular anterior and kidney-shaped posterior one on the elytra ; the shoulders of the elytra are also less prominent, and the punctures on the intervals are much finer. *A. oryzae* is stated to be a serious pest of rice.

***Acythopeus citrulli*, sp. nov. (fig. 5).**

Colour uniform dull black, entirely devoid of scaling both above and below. *Head* very finely shagreened and with small scattered shallow punctures. *Rostrum* about as long as the prothorax in the ♀, strongly curved, rather slender, and slightly dilated above the insertion of the antennae and at the apex, the upper surface closely and strongly punctate to beyond the middle, the punctures on the apical portion rather smaller and more distant, the scrobe continued as a shallow furrow from the antenna to near the apex; the rostrum of the ♂ shorter, more evenly punctate throughout, and less dilated at the middle and apex. *Antennae* with joint 1 of the funicle equal to 2-4 inclusive, joint 2 about as long as broad, the remainder transverse and slightly widening outwardly, the basal joint of the club a little longer than the rest together. *Prothorax* about as long as broad, the sides subparallel near the base,

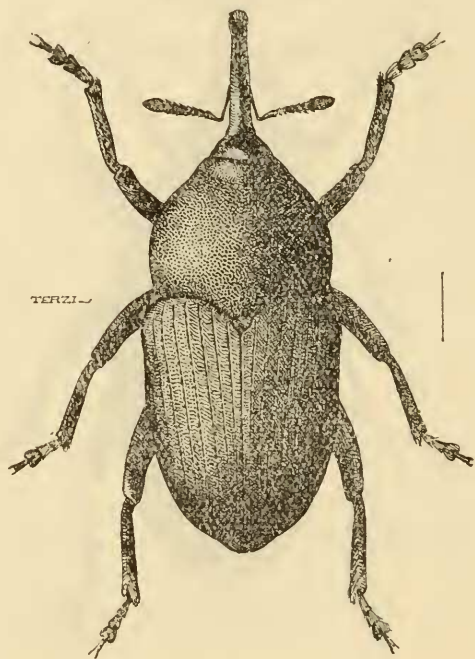


Fig. 5. *Acythopeus citrulli*, Mshl., sp. n.

thence rounded and strongly narrowed in front so that the apex is one-third the width of the base, with a distinct apical constriction, the base deeply bisinuate, the median lobe broadly rounded, the dorsum convex, densely and evenly set with large shallow punctures, the intervals between which form a regular raised net-work without any trace of a central line. Prosternum with a shallow longitudinal impression in front of the coxae containing two deep foveae placed transversely. *Scutellum* trapezoidal, the posterior margin being nearly twice as broad as the anterior. *Elytra* evidently broader at the shoulders than the prothorax and thence narrowed to the apex; the striae fairly deep and shiny, with the sides sharply cut and containing deep separated punctures throughout, the striae being rather broader and deeper just near the apex, where 9 and 10 unite to form a deep furrow; the intervals much broader than the striae, plane and finely shagreened, each with an irregular row of very shallow punctures (more or less duplicated near the base) each containing a short recumbent

dark seta ; the posterior callus feeble and an oblique costa behind it, which is virtually a continuation of interval 9. *Sternum* with close punctures throughout similar to those on the pronotum. *Venter* shagreened at the sides and there with punctures like those on the sternum but more shallow and separated, shiny in the middle and with much smaller and more scattered punctures, segments iii. and iv. being impunctate in the basal half. *Legs* dull, with coarse subconfluent punctation and short recumbent pale setae ; the posterior pairs of femora strongly furrowed beneath, the tibiae subsulcate externally.

Length, $4\frac{1}{2}$ – $5\frac{1}{2}$ mm. ; *width*, $2\frac{1}{4}$ – $2\frac{1}{2}$ mm.

MADRAS : Coimbatore ; Hadagalli (*type*) and Hagari, Bellary District ; Koilpatti, Tinneveli District.

A pest of water melons.

The previously described species of *Acythopeus* are all from the Malay Archipelago, and the present species may be distinguished from them by the impressions on the prosternum. In general shape and structure it is very like another South Indian Barid, *Apotomorrhinus cribratus*, Boh., which is however a dark brown insect, with a small tooth on the femora and with the first joint of the club much longer than all the rest together.
